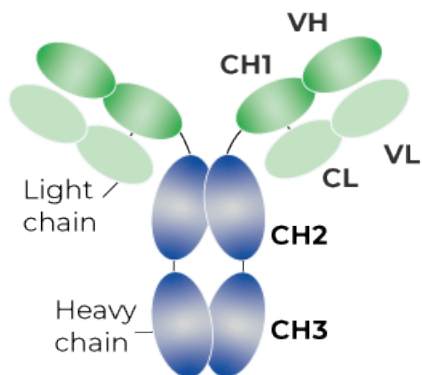
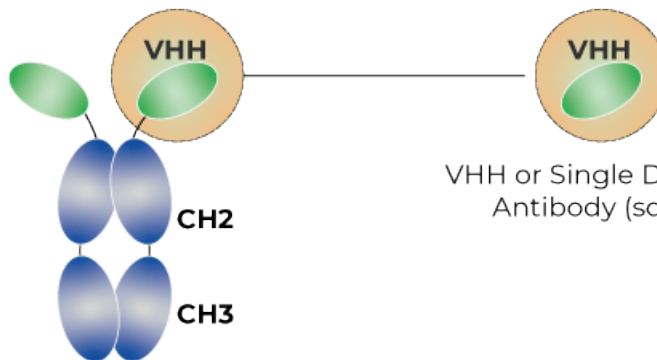


# Single Domain Antibody Development



Conventional Antibody



Camelid Heavy Chain Antibody

VHH or Single Domain Antibody (sdAb)

The Single Domain Antibody (sdAb) from camelids, also known as VHH antibodies, provides cutting-edge antibody technology. The sdAb lacks light chains and is smaller and more stable than conventional antibodies yet possesses fully functional antigen-binding capability. Due to its size (a mere 15 kDa), a single domain antibody is adept at reaching otherwise inaccessible epitopes.

## Features of Single-Domain Antibodies

- Smallest functional antibody unit at ~15 kDa
- Unique binding capacity to conformational epitopes and active sites
- More stable than conventional antibodies under extreme temperature and pH
- Recombinantly produced for lot-to-lot reproducibility
- Adaptable through antibody engineering

## Advantages of Partnering with ProSci

- 20+ years developing antibodies
- 20,000+ custom antibodies developed
- Customizable services tailored to your needs
- ProSci conducts sdAb R&D of therapeutics, develops and marketins sdAb products, and provides custom sdAb services

[Explore ProSci Single Domain Antibody Development Services](#)



ProSci Incorporated

12170 Flint Place, Poway, CA 92064, USA

prosci-services.com | services@prosci-services.com | +1 (858) 513-2638

# Single Domain Antibody Development Process



## Single Domain Antibody Development Packages

### Premier

Immunization through Library Construction

#### ● Phase 1: Immunization

- 1 Llama
- 1 Pre-immune serum collection
- 4 Immunizations
- 3 Test serum collections
- ELISAs on each bleed

#### ● Phase 2: PBMC Isolation

PBMC isolation from week 8 and 12 bleeds

#### ● Phase 3: cDNA Library Construction

sdAb library construction of Phase 2 PBMCs

#### Deliverables

sdAb library as glycerol stock of phage plasmid-containing bacteria

### Pro

Immunization through Final Clones

#### ● Phase 1: Immunization

- 1 Llama
- 1 Pre-immune serum collection
- 4 Immunizations
- 3 Test serum collections
- ELISAs on each bleed

#### ● Phase 2: PBMC Isolation

PBMC isolation from week 8 and 12 bleeds

#### ● Phase 3: cDNA Library Construction

sdAb library construction of Phase 2 PBMCs

#### ● Phase 4: Library Panning and Screening

2 rounds of panning  
ELISA screening

#### ● Phase 5: Single Domain Clone Selection and Sequencing

Selection and sequencing of binders  
Small-scale antibody production

#### Deliverables

Amino acid sequences of binders  
Purified antibody from up to 6 final clones  
Confirmed DNA sequences and glycerol stocks of final clones

**Need Something Different?**  
We can customize any package!

Contact Us



ProSci Incorporated

12170 Flint Place, Poway, CA 92064, USA

prosci-services.com | services@prosci-services.com | +1 (858) 513-2638

